## Abstract

10

Pulsed laser drilling is used to produce bore holes having a small diameter, for instance in hollow workpieces. Turbine blades, in particular, have a multitude of fine cooling air bore holes, which are able to be produced by this method with high positional accuracy and in an automated manner.

The object of the invention is to provide a checking method by which drilling faults, in particular with regard to piercing and bore-hole geometry, are detected in a more reliable manner.

The object is achieved by a method for checking a bore hole introduced in a workpiece by laser pulses, in which characteristic signals from the area of the bore hole are received with the aid of a sensor and compared to setpoint values and only signals received in a characteristic time interval following a laser pulse are taken into account.